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ABSTRACT

Guidelines for elementary and secondary school physical education are presented that conform to Alabama education laws and to competency statements prepared by the American Alliance for Health, Physical Education and Recreation. Physical education objectives are identified as developing and maintaining good health and physical fitness, acquiring motor skills, and participating in physically active recreation. Program content designed to promote these objectives is presented for each grade from kindergarten through grade twelve. Student characteristics, instructional objectives, and minimum requirements for student achievement are outlined. Organizational plans are suggested for grades six through eight and nine through twelve. The appendices contain profiles of exemplary programs at schools in Alabama, Georgia, Colorado, and Washington. Also included are discussions of the general philosophy and concepts of physical education, and a bibliography listing 26 publcations. (JD)

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ALABAMA COURSE OF STUDY

PHYSICAL EDUCATION

Wayne Teague
State Superintendent of Education
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ALABAMA LEGISLATURE AND STATE BOARD OF EDUCATION

STANDARDS FOR PHYSICAL EDUCATION

Title 16, Section 40-1 Physical Education Required

Every public school and private or parochial school shall carry out a system of physical education, the character of which shall conform to the program or course outlined by the department of education (School Code 1927, Section 621; Code 1940, Title 52, Section 555.)

*Title 16, Section 4-4 State Superintendent of Education

Students may be required to use appropriate gym clothes, but may not be required to purchase a particular type or color gym uniform. (Memorandum to Superintendents--August 20, 1976)

Title 16, Section 35-5 Studies required to be taught in elementary school

In every elementary school in the state there shall be taught reading, spelling and writing, arithmetic, oral and written English, geography, history of the United States and Alabama, elementary science, health education, physical education and such other studies as may be prescribed by the state board of education.

*Title 16, Section 4-4 State Superintendent of Education

Recess or lunch time activities should not be substituted for the daily physical education program. A minimum daily instructional period of at least thirty minutes in elementary physical education is required by Alabama State Law. (Alabama Elementary Course of Study, 1965)

*Title 52, Section 44, Code of Alabama--Refers to the duty and responsibility of the State Superintendent of Education to interpret the intent and meaning of School Laws of Alabama.

INTRODUCTION

As an integral part of the total educational program of the school, physical education programs have responded to the technological and cultural trends of the 60's and 70's, and ways have been found to make physical education more challenging and meaningful for all students. Children and youth are being introduced to activities in which they can participate for the rest of their lives. Students at all grade levels, in cooperation with their teachers, are being provided more freedom to select physical education activities.

Humanization, involvement, broadened base of competition, mini courses, and weekend physical education experiences which utilize local community resources are but a few examples of the expanded physical education programs of this decade.

As we approach the 21st century, one responsibility of the physical educator is preventive medicine. Medical research continues to document and support the fact that vigorous physical activity is important to the operation of healthy body systems and that, when subjected to cardiovascular and circulatory overload through physical activity, these systems tend to function more efficiently. Research also indicates that physical activity assists in the control of obesity, improves organic function, assists in the reduction of mental stress and tension, and contributes greatly to an individual's overall physical and mental health.

Physical education is to be used and enjoyed by the consumer--the student. The program must be designed to develop the basic concepts of physical education regarding: (a) mechanical efficiency of the human

body, (b) physical activity for a healthy organism, (c) acquisition of motor skills, and (d) the development of a healthful mental and social well being. The acquisition of both health and performance attributes is essential for the proper functioning of the individual.

There are many personal and societal education values in a well-conceived and well-taught physical education activity program. If curricula which stimulate the activity and psychological needs of children and youth are developed and if interested and professionally competent supervisors and teachers provide viable leadership and instruction, much can be derived from physical education. In a well-conceived and well-executed program, physical activity is a goal-centered, challenging and pleasurable experience. Students learn to understand themselves and others; they develop neuromuscular skills; and they develop a positive attitude toward continued physical activity for life and living.

Providing a coeducational, student-centered physical education curriculum in grades K-12 is a challenge to which all physical education teachers and administrators should be committed.

GUIDELINES

Guidelines prepared by committees of the American Alliance for Health, Physical Education and Recreation, have been developed for elementary and secondary school physical education. These guidelines are useful in the development of sound and comprehensive programs of school physical education.

Guidelines for Elementary School Physical Education Programs

A quality elementary school physical education program should:

1. Contribute to the development of self-directed, self-reliant, and fully functioning individuals capable of living happy, productive lives in a democratic society.
2. Have as its foundation a common core of learning experiences. This common core of learning is concerned with efficient body management in a variety of movement situations. It serves the divergent needs of all pupils--the gifted, the slow learner, the handicapped, the culturally deprived, and the average--and is geared to the developmental needs of each child.
3. Be planned and conducted to provide each child with maximal opportunities for involvement in situations calling for mental, motor, and emotional responses which will result in optimal and desirable modifications in behavior: skills, knowledges, and attitudes.
4. Provide for a variety of learning experiences to emphasize the development of basic concepts, values, and behaviors associated with the ultimate goals for the physically educated person.

5. Have curricular content so organized that levels of learning in attitudes, knowledge and skills are recognized and can take place in a sequential and developmental arrangement.
6. Encourage vigorous physical activity and attainment of physical fitness; develop motor skills; foster creativity; emphasize safety practices; motivate expression and communication; promote self-understanding and acceptance; and stimulate social development. It should include such experiences as basic movement, dance, games, practice in sports skills, self-testing activities, tumbling, apparatus and aquatics. Each must be so structured that it is interrelated with the others, permitting children to generalize from one learning experience to the next.
7. Deal effectively with the whole child. Many styles of teaching must be utilized in the various learning situations. These include both teacher-directed and self-directed learning. If learning is to be personalized and concerned with the cognitive and affective domains, problem solving as a teaching strategy becomes vital. A range of instructional aids, as well as teaching styles, audiovisual materials, large and small group instruction, individual help, and interdisciplinary approaches must all be considered.
8. Provide opportunity for participation in organized intramurals and such extramural programs as play days and sports days. These should be designed to serve the purpose of the class instruction phase of the program.

Guidelines for Secondary School Physical Education Programs

A quality secondary school physical education program should:

1. Have as its foundation a common core of learning experiences for all students. This core of experiences must be supplemented in ways that serve the divergent needs of all students--the gifted, the average, the slow learner, and the physically handicapped.
2. Provide for a reasonable balance in those activities commonly grouped as team and individual sports, aquatics, gymnastics, self-testing activities, dance, and rhythms.
3. Have a sequential progression in the specific skills and movement patterns involved in the activities included in the above groups.
4. Provide opportunity for selective learning experiences within the required program.
5. Provide opportunity for the acquisition of knowledge and understandings related to the development and function of the human body and to the mechanical principles of human movement.
6. Provide learning experiences (physical activities) to foster creativity and self-direction and to encourage vigorous activity.
7. Provide opportunity for the development and maintenance of balance, muscular strength and endurance, cardiovascular endurance, flexibility, speed, agility, coordination, and rhythm.
8. Provide experiences which reinforce the development of behaviors, attitudes, appreciations, and understandings required for effective human relationships.
9. Design special experiences for those students who find it difficult and uncomfortable to adjust to the regular program because of

physical, social, or emotional problems.

10. Teach basic skills which can be employed in appropriate yet comprehensive intramural, extramural (to include interscholastic sports), and recreational programs for all students.

PHYSICAL EDUCATION OBJECTIVES

Health, physical development, and motor skill acquisition are the unique contributions of physical education to the total development of the individual. This does not mean, however, that physical education is limited to the physical aspects of development. Well organized, well taught, appropriate movement experiences make a very real and highly positive contribution to the child in all phases of development. The major objectives of physical education are: (1) the development and maintenance of good health and physical fitness, (2) the acquisition of motor skills, (3) participation in physically active recreation. Physical education shares with other subject areas within the school in the enhancement of intellectual skills, emotional control, and desirable social skills.

Good Health and Physical Fitness

Development and maintenance of good health and physical fitness are essential for a person to carry out his daily tasks without experiencing undue fatigue. An individual consistently must demonstrate muscle strength, muscle endurance, flexibility, and cardiovascular efficiency; and at the same time attempt to be free from disease, make adjustments for physical handicaps, and maintain optimum physical weight. All of these factors are dependent upon physical movement. Physical education programs in the schools should provide the experiences necessary for this unique aspect of development.

Acquisition of Motor Skills

Motor skills are being developed even during the prenatal stage of life. Early in life, proper acquisition, development and refinement of

neuromuscular skills are essential for efficient body movement. As a child matures physically and experiences movement, his lifetime capacity for body movement is established. Uniquely, physical education provides experiences whereby a child develops and refines a wide variety of locomotor, manipulative, and stability skills.

Physically Active Recreation

Voluntarily selected leisure-time activities bring satisfaction and provide recreation to the individual. All persons need a change from dullness and monotony of life, and this change is provided through challenging, adventurous play. Activities done during free hours are recreative if these activities bring deep satisfaction and release from tension and, providing they are voluntarily done, if they offer change in the normal daily routine. Physical education can provide the development of skills, knowledge of techniques, rules of the game, and joy of participation so that our citizenry will effectively prepare for participation in lifetime recreation activities.

Intellectual Development, Emotional Control and Social Skills

Physical education makes a significant contribution to the intellectual, social, and emotional development of each student. Successful performance in movement activities is dependent upon intellectual development which includes knowledge of rules, techniques, and tactics of various activities. A considerable amount of health information is taught through warm-ups, conditioning procedures, safety measures, desirable sanitary practices, exercise precautions, and the like. Students are made aware also of various physiological factors, such as muscle soreness, hypertrophy, and second wind.

A good physical education program provides for the understanding and development of feelings for others. The real person seems to be revealed through close, face-to-face contacts of physical activity. In competitive sports one tends to throw off self-consciousness, artificiality, formality, and restraints. As a result, a person's basic character and personality are displayed. This, then, provides opportunities to obtain better understanding of one's self, while obtaining a better understanding of the behavior of others.

Physical education furnishes a laboratory for actual practices of the social skills. This laboratory provides real rewards and punishments, which with proper guidance will serve to encourage sportsmanship, cooperation, sociability, self-control, leadership, and other qualities of character and citizenship. Sportsmanship learned through physical activities develops traits which will enable students to function in a democratic society and respect the personalities of others. Students should be able to exhibit self-control in activities that are mentally stimulating and often emotionally intense, to react quickly and wisely under pressure, to be courageous, and to be resourceful.

Physical education provides an opportunity for each individual to act, interact, and react within self, as well as with others. Much of a person's actions is determined by one's self-concept and sense of self worth. If a person moves well, his body image is improved, and this contributes to self-concept development and total body awareness.

Physical education constantly affords learning situations that will help each student in the development of social and emotional behavior. The recognition of the rights and privileges of others is developed

through physical activity. Self-centered drives of young children are gradually rechanneled as group spirit develops.

MINIMUM REQUIREMENTS

The minimum requirements represent a sequentially developed program of physical education for kindergarten through grade twelve. The requirements have been grouped by grades in the following arrangement: kindergarten, one and two; three; four and five; six, seven and eight; nine, ten, eleven and twelve. This arrangement was chosen to correspond to the rather significant developmental characteristics of students in certain grade classifications.

There are many different organizational patterns in the Alabama schools. Requirements for all grades are outlined, and individual schools may adhere to the requirements related to their specific grades in their schools.

The specific activities, elements to be included, approaches or strategies to be followed, instructional procedures to be utilized may be found in the State Physical Education Curriculum Guides and other physical education texts suggested in the bibliography.

General Considerations: Grades K-2

In the kindergarten the primary purposes of physical education are related to basic body management and fundamental movement skills, self-awareness, and creative expression. The fitness needs of the children are enhanced through the motor development skills and through related fitness activities. Certain basic health and fitness concepts are introduced.

The child learns to understand and control the many ways his/her body may move through exploration, problem-solving activities. The first grade program purposes are basically the same as kindergarten,

continued emphasis on locomotor skills and additional emphasis on developmental and self-testing activities such as simple apparatus, stunts, and tumbling. Manipulative skills are stressed as the foundation for later play skills. The creative aspect of rhythmic activities has a permanent place in the first grade program, and includes story games, creative movement, singing games, and simple folk dances. Students at this early age should be taught basic organizational patterns utilized in all physical education content areas.

The second grade program, with emphasis on locomotor and manipulative skills, serves to introduce the student to more organized play. In the area of rhythmic activity there is more emphasis placed on simple folk dances and other rhythmical activities. Group play becomes more structured as lines, circles, and other formations are used.

Instructional Objectives: Grades K-2

The instructional objectives for K-2 are:

1. To introduce safety skills and habits and to develop awareness regarding safety for self and others.
2. To structure the physical education program so that each student can become competent in body management and control and acquire useful motor skills: (a) locomotor (b) nonlocomotor (c) manipulative skills (d) body and space awareness (e) balance (f) coordination and rhythm.
3. To provide each student with the opportunity to develop and maintain a level of physical fitness commensurate with individual needs.
4. To provide a physical education learning environment in which the student can acquire desirable social skills and ethical concepts.

5. To enhance academic achievement through a variety of activities, especially those activities which employ the creative, problem-solving teaching strategy.
6. To acquire a realistic self-image and develop a desirable self-concept through relevant physical education experiences.
7. To design learning experiences so that each child will be stimulated to seek participation in and derive enjoyment from wholesome recreation during play.

Minimum Requirements: Grades K-2

1. Students should have a consciousness of safety for self and safety for others in all physical education activities.
2. Students should demonstrate skill in the basic locomotor activities of walking, running, jumping, hopping, and skipping and the nonlocomotive movements of bending, twisting, turning, reaching, and stretching.
3. Students should demonstrate basic skill in the manipulative skills such as throwing, catching, kicking, and striking.
4. The students should participate in movement experiences to learn and to improve the concepts of space awareness, body management, and other movement qualities.
5. The student should participate in a variety of activities to enhance the sensory-motor functions of eye-hand, eye-foot, and total body coordination.
6. Students should participate in a wide variety of story games and dramatic play, simple developmental/self-testing activities, rhythmic activities, balance activities, and chasing and fleeing

low organized games.

7. Students should participate in health-related fitness activities based on the results of a health-related fitness screening test. (See Appendix H.)

General Considerations: Grade 3

This transient age at times needs a curriculum more closely associated with the activities offered fourth grade students, and at other times students in grade three need activities more closely aligned to those of second graders. Assessment of student skill level is necessary with activities to improve and refine skills planned accordingly.

Concepts of the relationship between health and physical activity are introduced, and lead-up activities for team games are added. Good sportsmanship habits are stressed.

Instructional Objectives: Grade 3

The instructional objectives for grade 3 are:

1. To teach students the safety skills needed for specific physical education activities, to develop an awareness of the hazards of each activity, and to provide leadership in seeing that safety precautions for each activity have been met.
2. To promote growth and development through physical fitness activities.
3. To introduce concepts related to the health aspects of fitness such as cardiovascular endurance, flexibility, strength and weight control.
4. To provide experiences necessary for the improvement of basic skills, particularly the manipulative skills such as throwing, catching, striking, and kicking.
5. To provide continued stimulation for the concepts related to the movement of balance, agility, speed, coordination/rhythm, and strength.

6. To promote social and emotional development and to emphasize concepts of cooperation and competition.
7. To design learning experiences that provide for approval and acceptance of self and others.
8. To provide the opportunity for students to develop skills and concepts for a variety of activities to be used in active play.
9. To provide for the enhancement of academic achievement through a variety of activities involving problem solving, exploration, and creativity.

Minimum Requirements: Grade 3

1. Students should have a consciousness for safety for self and safety for others in all physical education activities.
2. Students should recognize hazards and unsafe conditions and be able to correct them or to notify school authorities of their existence.
3. Students should apply all rules and regulations governing safety in physical education activities.
4. All students should participate daily in a precise physical development program. Exercises to develop both health-related and skill-related aspects of fitness should be included: exercise routines, circuit training, grass drills, jogging, etc.
5. Physical fitness testing is important to the third grade physical education program. All students should be given a valid, reliable, and acceptable test in the late fall and in mid spring of the school year after sufficient motivation and conditioning. (See Appendix H.)
6. Students should refine locomotor and nonlocomotor skills through low organized games, rhythms, developmental self-testing, and

tumbling activities.

7. The student should continue to show improvement in general manipulative skills utilized in sports and through direct instruction in throwing, catching, striking, and kicking activities. (Games and other activities which employ manipulative skills provide a useful laboratory for the evaluation of the students' achievement of these simple skills.)
8. The student should be introduced to swimming and water safety skills if facilities and certified instructors are available.

General Considerations: Grades 4 and 5

The major program consideration for grades 4 and 5 represents a shift to more emphasis on specialized skills in gymnastics, track, and field and particularly selected sports.

More emphasis is also placed on physical fitness and developmental activities. A variety of rhythmical activities are presented as the emphasis shifts away from the movement fundamental to more precise skills. Group responsibilities with the opportunity to develop leadership and followership skills are encouraged.

Instructional Objectives: Grades 4 and 5

The instructional program of the intermediate grades should build on the skills learned in the primary grades. Progression is the key word, and the fourth grade sets the pace for this progression of specialized skills in sports, gymnastics, and track and field.

The instructional objectives for grades 4 and 5 are:

1. To continue to emphasize safety and to teach the safety skills needed for the specific physical education activities.
2. To develop a sense of awareness to the hazards of each activity and to provide leadership in setting safety standards to be met related to each activity.
3. To promote growth and development through physical fitness activities.
4. To continue to stress concepts related to the health-related aspects of fitness and good body mechanics. (See Appendix H.)
5. To provide experiences necessary for the development of specific skills, particularly through drills and lead-up activities.

6. To design learning experiences that encourage participation and enhance the concepts of cooperation and competition.

Minimum Requirements: Grades 4 and 5

1. Students should understand and practice safety in all physical education activities.
2. The student should participate in physical development and maintenance programs which include organized fitness activities and testing.
3. Students should take a valid and reliable physical fitness test to determine the students' level of performance in the various aspects of physical fitness and to establish individual standards of achievement. Physical fitness testing should take place in the late fall and in mid spring of the school year after sufficient motivation and conditioning. The progress of low-fitness children should be monitored more often. (See Appendix H.)
4. The student should develop more specialized skills in all activity areas, especially sports skills, through:
   (a) gradual involvement in sports through refinement of skills in lead-up games.
   (b) introduction of rhythmical activities with more specialized steps emphasizing technique and socialization.
   (c) Standard tumbling skills, combatives, and other self-testing activities.
   (d) vigorous games and relays.
5. Students should be provided with an extended physical activity program, which includes a well-rounded, well-organized intramural program. The intramural program should be an outgrowth of the physical education instruction program. Limited extramural, "special events," days may be an outgrowth of the intramural program.

Grade-level placement for physical education activities in the elementary grades has been suggested-based on the developmental needs of students and their readiness to participate successfully in the activities. Adjustment upward or downward with respect to the grade level, especially in the primary grades, can be made as need indicates and individual program circumstances are determined.

General Considerations: The Middle School/Junior High School
Grades 6, 7 and 8

It is difficult to describe or categorize the middle school student. This period of transition for him/her is one of stresses and strains, of upheaval in his/her emotional, social, intellectual, and physical worlds. This is a period of great physical change, of uneven growth, and of wide variations among students' height, weight, and physical maturity. Instructional objectives must be sensitive to these differences and also to the middle school students' strong desire for peer approval.

At times self-centered, the student is predominantly idealistic, so the instructional objectives should offer opportunity to build wholesome group allegiances. Teamwork becomes a natural vehicle for "practicing" cooperation and individual effort as applicable to group effort.

Thus, after skill acquisition, competition at the middle school level is a vital educational tool. The fun of winning is congruent with American ideology as a bona fide student objective. This objective, however, should not overshadow the objective of the sheer joy of participating or the objective of learning positive values from defeat. Competitive situations should be flexible so that no student remains in a loss-oriented position. Competition against self, to beat one's former record, is an excellent tool. Additionally, games where students forming one team compete against a former team record or compete against an inanimate object build cooperative group awareness.

A broad, strong and ability-based intramural program should be available. Only when this is established should inter-school competition be considered within the framework of educational goals.

The middle school/junior high school student needs a "home-base" teacher to provide guidance and assistance. Additionally, students profit from exposure to the teaching expertise of an entire middle school physical education staff which uses variations in instructional patterns to meet the varying learning rates of this transient group.

Instructional Objectives: Grades 6, 7, and 8

The instructional objectives for grades 6, 7, and 8 are:

1. To instruct students in specific safety measures for specific physical education activities. This is of particular concern because of the functional changes affecting body control, as a result of rapid growth, and the high energy levels and adventuresome spirit which are characteristics of this age group.
2. To continue to develop and maintain optimal physical fitness of the students through:
   (a) screening students as early as possible in the school year in order to set up individualized remedial and maintenance programs. Screening tests should be simple to administer and should not be unduly stressful.
   (b) continuing physical development activities geared to improving and maintaining specific fitness needs of the students. The physical improvement and maintenance components of the program should include specific fitness activities for improving and maintaining the health-related aspects of fitness (i.e., cardiovascular endurance, muscle strength, muscle endurance, flexibility, and the skill-related aspects of fitness--i.e., agility, speed, power, coordination, and balance).
   (c) administering the AAHPERD Health-Related Physical Fitness Test and/or other valid, reliable tests at a reasonable time in the fall and mid spring following student motivation and student conditioning. Prior to the end of the school year, testing should be administered intermittently for the underachievers. Testing should be done for the purpose of diagnosis, program planning, and student motivation. To prevent undue stress, physical fitness pretests should follow a basic program of conditioning. (See Appendix H.)
3. To develop specialized movement abilities such as "striking" a tennis ball, executing a gymnastic skill or performing a specific dance

pattern.

4. To develop each activity on a continuum so that students can progress in skill acquisition on an individual basis throughout the middle school years.
5. To determine each student's skill level for a particular activity before beginning instruction in that unit. Thereafter, appropriate activities should be designed for the students' acquisition of needed skills.
6. To offer a wide range of exploratory activities for the socializing, interest-developing, and leisure-enriching needs of the student.
7. To provide opportunities for self-direction especially and for other social and emotional growth commensurate with the students' level of maturity.
8. To provide opportunity for effective use of physical education knowledge and skills through class performance, field trips, intramurals, mini-courses, clubs, and open recreation periods.
9. To design individual physical educational programs based upon assessment and need for special students (P.L. 92-142).
10. To instruct students in the principles of equipment selection and maintenance as a sport or other activity is introduced.
11. To acquaint students with the many careers in sports and physical education.

Minimum Requirements: Grades 6, 7 and 8

1. Students should understand and practice safety in all activities. Safe use of equipment and apparatus is basic to all physical education activities.

2. Students should meet physical fitness standards or follow a prescribed remedial fitness program.
3. Students who are identified for physical fitness remediation are expected to develop competencies within their individually prescribed program.
4. Students who do not respond to remediation should be referred to the school nurse, to the guidance counselor, or other school or community personnel who may influence the individual student's health habits.
5. Students should demonstrate knowledge and skill in at least four team sports, three individual sports, two categories of dance, and basic outdoor recreation skills yearly. Demonstrated competency in selected self-testing activities should be expected during the middle school years.
6. Students should demonstrate specified swimming and junior life-saving skills in physical education programs where school facilities or community resources and qualified personnel are available.
7. Students should demonstrate desirable social and emotional growth through knowledge of good citizenship practices and good sportsmanship traits, self-control in trying situations, honesty, courtesy, consideration toward fellow students, and understanding for the physically weak and clumsy.
8. Through group interaction, each student should gain some degree of social confidence as a leader and as a follower and develop friendships and a sense of belonging in a physical activity group.
9. Each student should have the opportunity to experience joy and spontaneity in physical activity.

10. Health- and skill-related fitness activities should be selected to compliment the activities in each unit.

The minimum requirements for physical education in grades 6, 7 and 8 are summarized in Table I. Recognizing that the requirements for physical education in grades 6, 7 and 8 are minimal, instruction in as many different activities as possible should be provided students.

Table I

The Middle School/Junior High School
Grades 6, 7 and 8

Minimum Requirements

	A	B	C	D	E	F
Health- & Skill-Related Fitness	Team Sports	Individual & Dual Sports	Rhythmical Activities/Dance	Self-Testing Activities	Recreational Activities	Aquatics
Use Activities/Exercises From This Category With Each Unit*	Choose Four Yearly	Choose Three Yearly	Choose Two Yearly	Choose Two Yearly	Choose Two Yearly	Dependent on Facilities/ Certified Instructor
Cardiovascular Endurance Muscle Strength & Muscle Endurance Flexibility Coordination Speed/Power Agility	Basketball Flag Football Hockey (Field & Floor) Soccer Softball Speedball Speedaway Volleyball	Archery Badminton Bowling Golf Handball Racquetball Table Tennis Tennis	Ballet Folk Jazz Modern/Creative Social Square Tap	Challenge Course Combatives/ Wrestling Gymnastics Apparatus Floor Routines Tumbling Track & Field	Backpacking Camping Skills Casting Cycling Hiking International Games Low Organized Games New Games Relays Orienteering	Canoeing Diving Swimming Lifesaving
	Other Selected Sports	Other Selected Sports	Other Selected Activities	Other Selected Activities	Other Physically Active Recreational Activities	Other Water-Related Activities

*A unit is a period of time devoted to instruction in a sport or activity. (See suggested unit organizations, page 33.)

General Considerations: The Senior High School
Grades 9, 10, 11 and 12

Senior high school students are maturing physically, mentally, socially, and emotionally and require activities that are relevant, stimulating, and challenging.

If physical education instruction in the Alabama schools has followed a sequential comprehensive pattern, then the senior high school physical education program may be based primarily on the interests of individual students, and the activities selected accordingly.

This selective physical education program allows for both proficiency and variety.

Instructional Objectives: Grades 9, 10, 11 and 12

The instructional objectives for grades 9, 10, 11 and 12 are:

1. To instruct students in specific safety techniques for specific physical education and leisure activities.
2. To provide students the opportunity to maintain an optimal level of physical fitness.
3. To emphasize directly and indirectly the value of physical activity to total health.
4. To provide students, through a selective physical education program, the opportunity to develop greater proficiency and mastery in a variety of physical education activities and sport skills.
5. To provide the student basic instruction in physical education activities and sports not experienced at an earlier grade.
6. To provide students the opportunity to practice self-reliance and independence and to nurture self-respect; therefore, contributing to a positive self-image.

7. To continue to provide opportunity for student leadership and participation in physical education class performances, field trips, intramurals, mini-courses, clubs, and open recreation periods.
8. To continue to provide individual physical education programs based upon regular assessment and need for special students.
9. To help students recognize the societal values inherent in play, sport, and physical activity.
10. To instruct students in the principles of selection and maintenance of sport and recreation equipment and related consumer services.
11. To assist students with the evaluation of vocational choices in sport and physical education.

Minimum Requirements: Grades 9, 10, 11 and 12

The minimum requirements for grades 9, 10, 11 and 12 are based on the assumption that the student will complete one-half unit of credit (one semester) of Health Education and one-half unit of credit (one semester) of Driver and Traffic Safety Education during the high school years. This provides for a minimum of three units or six semesters of instruction in physical education.

1. Students should have an understanding of the need for safety and should practice safety in the use of all physical education equipment and apparatus.
2. Students should meet acceptable levels of physical fitness as measured by the AAHPERD Health-Related Physical Fitness Test or any comparable, valid and reliable test. Students who do not meet acceptable levels of fitness should be advised to participate in individualized programs of health-related fitness activities. (See Appendix H.)

3. Students should participate in prescribed in-class and out-of-class activities to maintain optimum levels of health-related fitness if the nature of the regular instructional activity does not allow for development and maintenance of health-related fitness.
4. All students should participate in physical education and sport activities (specifically designed if necessary) based upon their special needs.
5. Students should select a minimum of two units of instruction annually from individual/lifetime sports category.
6. Students should select a minimum of one unit of instruction annually from each of the following categories: team sports, dance, and outdoor recreation.
7. Students should select two units of instruction in self-testing activities during the senior high school years.
8. Students should continue to practice desirable citizenship and sportsmanship habits and to show consideration and compassion for the uncoordinated and less physically capable student.
9. Each student should have the opportunity to experience joy and spontaneity in physical activity.
10. Students should select two units in aquatics, including all water-related sports during the high school years where teaching certification and facilities permit.

The minimum requirements for physical education in grades 9, 10, 11 and 12 are summarized in Table II.

Table II

The Senior High School
Grades 9, 10, 11 and 12

Minimum Requirements*

Health-Related Fitness	A Team Sports	B Individual & Dual Sports	C Dance	D Self-Testing Activities	E Recreational Activities	F Aquatics
Use Activities/Exercises From This Category With Each Unit	One Unit Yearly	Two Units** Yearly	One Unit Yearly	Two Units During Senior High Years	One Unit Yearly	Dependent on Facilities/ Certified Instructor
Cardiovascular Endurance Muscle Strength & Muscle Endurance Flexibility	Basketball Cricket Field Hockey Flag Football Flickerball Floor Hockey Soccer Softball Speedball Squash Team Handball Volleyball	Archery Badminton Bowling Fencing Golf Handball Racquetball Table Tennis Tennis	Ballet Folk Jazz Modern Social Square Tap	Aerobic Rhythms Jogging Gymnastics Apparatus Floor Routines Tumbling Self-Defense Track & Field Weight Control Weight Training Wrestling	Back Packing Camping Skills Casting/Angling Cycling Hiking New Games Orienteering Outdoor Survival/ Wilderness Skills Skating	Diving Canoeing Swimming Lifesaving Synchronized Swimming
	Other Selected Sports	Other Selected Sports	Other Selected Dance Activities	Other Selected Self-Testing Activities	Other Physically Active Recreational Activities	Other Water-Related Activities

*Recognizing that the Requirements are minimal, students in the senior high school should select additional units based on interest and personal goals.
**A unit is a period of time devoted to instruction in a sport or activity. (See suggested unit organizations, page 33.)

THE UNIT: SUGGESTED ORGANIZATIONAL PLAN FOR GRADES 6-8 AND 9-12

A unit refers to a period of time during which the anticipated accomplishments inherent through an activity are expected to be accomplished. Units may vary in length from several days to three or four weeks. Should an extended period of time be needed for anticipated accomplishments, it is suggested that two units be scheduled and designated "Basic" and "Intermediate" or "Advanced 1" and "Advanced 2." Should less time be needed for anticipated accomplishments, it is suggested that activities be grouped or clustered in compatible three-week units.

Example: High School

(Each activity will include complimentary physical fitness maintenance activities.)

Tennis 1 - basic - three weeks
Tennis 2 - intermediate - three weeks
Tennis 3a - advanced - three weeks
Tennis 3b - advanced - three weeks

Cluster 1 - active recreational games, table tennis intro. aerobic rhythms - three weeks
or
Cluster 1 - conditioning and aerobic rhythms - three weeks
or
Cluster 1 - table tennis and badminton - three weeks

An example of incompatible clustered activities would be a combination of physically active recreational games and weight training. Since the inherent goals of the activities are dissimilar, a student may wish to select one of the activities but not the other or the student may prefer another offering to accomplish the second unrelated goal.

When physical education curriculum offerings are planned in a unit framework, the logical "starting point" is the expertise of the teaching

staff, climate,and available facilities as well as consideration of balance and reasonable interests of the students. After the teaching staff feels comfortable with unit offerings, gradually new offerings, based upon interest and newly acquired expertise of teachers as well as student interest and balance and possibly dependent upon newly acquired equipment and facilities, should be made available.

Time allocations for units logically become the second consideration. In the middle school/junior high school, it may be determined to divide the thirty-six week school year in this manner (Units include complimentary physical fitness development.):

Organization - one week
Team Sports & Fitness Testing - fourteen weeks
(Units of 4, 4, 4, 2 or 4, 4, 3, 3, as needed)
Individual Sports - seven weeks
(Units of 3, 3, 1 or 3, 2, 2, as needed)
Rhythmical Activities/Dance & Self-Testing Activities - ten weeks
Recreational Activities - four weeks
Total - thirty-six weeks

Time allocation on the high school level must take into consideration that the student's required selective units will utilize approximately fifteen to twenty weeks of the thirty-six weeks of the school year.

Organization - one week
Individual Sport (1) - three weeks
Individual Sport (2) - three weeks
Team Sport - three to four weeks
Rhythmical Activities/Dance - three weeks
Recreational Activities - three weeks
Self-Testing Activities - average one and one-half weeks
Fitness Testing - two weeks

The total number of students to be accommodated at "X" class period, the nature of an activity, facilities, climate,and teaching staff are major considerations when planning units. A tennis unit may necessitate

a maximum class size of twenty-four; whereas, fifty students may be effectively accommodated in a class of aerobic rhythms. Again, student interests and balance are important factors in unit offerings and scheduling.

With cooperative and creative planning, unit organization becomes the key to an effective physical education program.

ALTERNATIVE CONTENT

Beyond the recommended minimum requirements, local school systems should provide additional physical education experiences in keeping with physical education goals, facilities, staffing, student interests, students needs, and administrative and community philosophy.

These innovative programs should include enrichment experiences for students at all age levels. The content may be provided through career-directed and leadership programs, outdoor education, and other selective student-directed curricula.

The units may utilize a number of innovative instructional patterns such as mini-courses, independent study, and contract curriculum.

These units may be selected from the activities suggested in Tables I and II as well as from subject areas such as physiology of exercise and sports officiating. Yoga, sailing, scuba diving, judo, and self-defense are examples of enrichment activities not found in the typical instructional program.

Enrichment alternatives may include time frames beyond the school day or beyond the school week. For example, weekend or holiday applications of learned skills.

In an effort to assist the reader in a clearer understanding of the material in the Course of Study, additional program information, examples of program activities, organizational strategies, reference material, unit plans, and examples of administrative program forms appear in the appendixes.

While these materials do not necessarily represent all available ideas, they do present ideas worthy of your consideration.

APPENDIX A

Selective Physical Education

Grades 9-12

Greenville, Alabama

Greenville (Alabama) High School - Selective Physical Education Program

The major purpose of the selective physical education program at Greenville (Alabama) High School is to stimulate interest in physical education and to provide a wide variety of physical activities for students who have had limited cultural opportunities. Activities are selected within the required program of physical education. It is felt that the broad selection of activities enables students to develop various motor skills, while learning adequate skills necessary for leisure-time activities. Students are encouraged to acquire a better appreciation of physical activities characteristic of our culture.

Outline of Courses: Each student is required to take a health unit and a physical fitness unit within the program. The standards for the physical fitness tests are those of the President's Council on Physical Fitness and the Governor's Council on Physical Fitness. Yearly activity additions and deletions are based upon staff evaluations, which are conducted each spring semester. Present offerings include: rhythmical exercise (aerobics), cross country or jogging, soccer, softball, track and field, volleyball, stunts and tumbling, square dance, tap dance, ballet, folk dance, floor hockey, camping, putt putt golf; (these are taught as one unit): table tennis, handball, paddle tennis, and shuffleboard; skateboard, skating, weight lifting, cycling, badminton, cheerleading, B B gun, archery, chip and putt golf, croquet, and horseshoes. Previously, scooter hockey and basketball were included in the selection. In the future, these activities may be offered: swimming, bowling, gymnastics, and tennis.

Description: In grades nine through twelve, there are 650 students who take physical education. There are six periods a day, with 55 minutes per period. Four instructors, two females and two males, organize and teach the program. Class periods vary from 40-200 students per period. All activities are coeducational.

At the beginning of the school year students make activity selections for the year. From a pre-scheduled listing, activities are offered on a three-week time period. In scheduling activities, these factors are considered: facilities, funds, teachers' abilities, equipment, transportation, and weather. Other factors that are considered are whether or not students will require special attire and whether the activities are vigorous or nonvigorous. Combinations of these last elements seem to be important in establishing a well-rounded program.

The following is a typical year's schedule of activities.

Greenville High School Physical Education
First Semester Schedule

first six weeks

Aug. 29 - Sept. 16	Sept. 19 - Oct. 7
Orientation	Weight lifting - stage
Hygiene and grooming	Skateboard - recreation and outside (appropriate dress)
Teeth check - gym	Musical exercise and conditioning (aerobics) - gym
Completion of program cards	
Selection of program	

second six weeks

Oct. 10 - Oct. 28	Oct. 31 - Nov. 13
Soccer - field	Camping - outside and physical education room (appropriate dress)
Skating - rink (appropriate dress)	Volleyball - gym
Jogging - track or cross country	Ballet and Modern dance - recreation or weight room

third six weeks

Nov. 21 - Dec. 9	Dec. 12 - Jan. 13
Square dance - gym	Trampoline - gym
Tap dance - recreation or weight room	Floor hockey - recreation
Health - classroom	Health - classroom
9th and 10th	11th and 12th

Second Semester Schedule

fourth six weeks

Jan. 16 - Jan. 20	Feb. 12 - Feb. 26
Election of program for 2nd semester	Physical fitness test - all classes
Jan. 23 - Feb. 10	
Skating - rink	
Shuffleboard, handball - gym	
Table tennis and paddle tennis	
Stunts and tumbling - recreation	

---

fifth six weeks

Feb. 27 - Mar. 24	Mar. 27 - Apr. 14
Folk dance - recreation	Badminton - gym
Putt putt golf - gym	Cheerleading - recreation or outside
Track and field - track	Cycling - road (appropriate dress)

---

sixth six weeks

Apr. 17 - May 5	May 8 - May 26
Archery - field	Golf (chipping) - field
Softball - field	Horseshoes and croquet
B B gun - gym	Skateboard - recreation and outside

Conditions Specific to the Program: On the high school campus there is a gymnasium with a stage, a playing field (football size), a graded

track, dressing rooms, locker rooms, and dressing areas. Another city-owned gymnasium is adjacent to the school. Community facilities which are available include a roller skating rink and a bowling center (under construction). Yearly, one dollar per student is appropriated through instructional monies.

Evaluation: Strengths of the program include: (1) students are experiencing and acquiring skills of many different kinds of physical activity; (2) greater student participation and interest are evident; (3) few discipline problems exist; (4) students are acquiring a new sports, games, and dance vocabulary; (5) teachers are broadening their skills; (6) greater cooperation is demonstrated among teachers; (7) teachers are in contact with more students; and (8) a broad activity program can be provided with a limited budget.

Appendix B

Alexander City Junior High School

Grades 7-9

Alexander City, Alabama

Curriculum of Alexander City (Alabama) Junior High School

Alexander City (Alabama) Junior High School provides a comprehensive and progressive program of physical education for students in grades seven, eight, and nine. Because the school serves also as the community recreation center, more facilities and equipment are available for school use than would otherwise be the case. This makes possible a variety of physical education activities which include:

1. Adapted Classes for Special Students
2. Angling
3. Archery
4. Badminton
5. Baseball
6. Basic Physical Education
7. Basketball
8. Beam and Vaulting Box
9. Flag Ball
10. Floor Exercises
11. Golf
12. Gymnastics - Tumbling
13. Outside Bars
14. Recreational Games
15. Rhythms and Exercise
16. Shuffleboard
17. Soccer
18. Softball
19. Speedball
20. Swimming
21. Table Tennis
22. Tennis
23. Touch Football
24. Track and Field
25. Trampoline
26. Volleyball
27. Weight Training
    a. With Bars
    b. With Weight Machine
28. Wrestling

Puckett, John, Guide to An Effective Physical Education Program. New York, New York: Parker Publishing Co., Inc, 1976.

Appendix C

Proposed Physical Education for Experimentation

Grades 10, 11 and/or 12

Denver, Colorado

Denver Public Schools - Division of Education

Proposed Course for Experimentation
All Senior High Schools

Course Syllabus

Department Physical Education

Name of Course Advanced Dance

Grade Level 10, 11 and/or 12

Number of Semesters Six

Condition for Enrolling Pupils None

Special Conditions for Offering Teacher approval

Date _____

Objectives

I. To provide opportunities to learn a variety of advanced rhythmical movements and dance patterns
II. To help develop neuromuscular coordination, strength, endurance, flexibility, balance, and agility
III. To provide many opportunities for creativity and self-expression
IV. To assist in the development of self-confidence and perseverance
V. To help pupils acquire advanced choreographic techniques
VI. To provide opportunities for pupils to exhibit techniques at programs, demonstrations, and concerts
VII. To provide experiences that will help each student feel good about herself, to recognize the variety of human talents and interests exhibited by others, and to accept her own and their limitations.

Outline

I. History of Dance
   A. Primitive
   B. Ancient
   C. Medieval
   D. Renaissance
   E. Modern
II. Advanced Exercises and Long-movement Phrases
   A. Locomotor
   B. Axial
III. Advanced Rhythmical Experiences
   A. Rhythmic patterns
   B. Kinesthetic response
   C. Breath and emotional rhythm

IV. Advanced Choreographic Technique
   A. Design
   B. Dynamics
   C. Motivation and gesture
   D. Music for dance
   E. Sets and props
   F. Form
V. Use of Improvisation as a Means of Creating Movement
VI. Program Planning
   A. Dance demonstrations and concerts
   B. Costumes
   C. Make-up

Puckett, John, Guide to An Effective Physical Education Program. New York, New York: Parker Publishing Co., Inc., 1976.

Appendix D

Atlanta Public Schools

Intermediate Gymnastics

Atlanta, Georgia

Atlanta Public Schools - Intermediate Gymnastics

Objectives	Content	Activities
The student must be able to perform warm-up exercises correctly.	Warm-up exercises Shoulder strength and agility Individual and dual stunts and walks	Have students perform warm-up exercises emphasizing shoulder strength and agility. Use each day warm-up exercises that apply to the stunts and skills being taught.
Name the equipment used.	Equipment Mats Apparatus	Have students set up equipment and mats.
List ten safety factors in gymnastics.	Safety Equipment Spotters	Emphasize safety. Have students as spotters at each station.
Perform required basic tumbling skills.	Basic skills Tumbling: rolls, handstand, headstand, individual stunts	Demonstrate and have students practice basic tumbling skills.
The student must be able to perform the required skills on the balance beam.	Balance beam Front support Crotch seat mount Walk-forward, backward Crouch turn Tip-toe turn Straddle jump, dismount Low balances	Demonstrate one skill at a time. Have students practice each skill before going to a new skill. (On each piece of equipment.)

Objectives	Content	Activities
Perform the required vaulting skills.	Vaulting Side horse: squat vaulting; straddle vaulting; flank vault; front vault; support stunts - (boys) front rest, rear rest, feint, single leg half circle, single leg full circle, double leg half circle Long horse: straddle vault, squat vault	After practicing the skills taught, have students combine skills on each piece of equipment into a routine to be performed for a grade. Emphasize safety on all equipment and have students practice this daily.
The student must be able to perform the required free exercise composition.	Free exercise Short composition: tumbling, balancing, flexibility, strength (boys)	Have highly skilled students help others.
Perform the required skills on the trampoline.	Trampoline Mounting Dismounting Simple bounce Seat drop Knee drop Hand and knee drop Front drop Back drop	Have students perform in small groups when grading. Divide the class into groups for practice in class.
Perform the required skills on the uneven bars.	Uneven bars Straight arm support mount Dismount-push off low bar with quarter-turn roll over the top bar	Provide time after school for students to practice skills. Plan performances for PTA and the student body in combination with advanced gymnastics.

Objectives	Content	Activities
	Skin the cat Sideward crotch circle Hip pullover	
The student must be able to perform the required skills on the parallel bars.	Parallel bars Straight arm support Swing Dip Straddle seat Front support turn Shoulder balance Backward straddle shoulder roll	
Perform the required skills on the rings.	Rings Still rings Pike hang Bird's nest Skin the cat Inverted hang Single leg cut dismount Dislocate L seat Straight arm support Flying Rings Flyaway (see still ring stunts)	
Perform the required stunts on the ropes.	Rope climbing Emphasize height and speed	

Puckett, John, Guide to An Effective Physical Education Program. New York, New York: Parker Publishing Co., Inc., 1976.

Appendix E

Physical Education Preregistration Form

Newport Senior High School

Seattle, Washington

PHYSICAL EDUCATION PREREGISTRATION FORM

Newport Senior High School, Seattle, Washington

NAME _____

Directions:

1. Review course selection guide.
2. Fill in time blocks with course numbers only.
3. Circle period preference (one only) EH 1 2 3 4a 4b 5 6 7

Quarter (circle one)	First 4 ½ Weeks	Second 4 ½ Weeks
1		
4		
Alternate Choice 1		
4		

Quarter (circle one)	First 4 ½ Weeks	Second 4 ½ Weeks
2		
3		
Alternate Choice 2		
3		

FALL AND SPRING COURSE SELECTIONS
(for the first and fourth quarters)

902 Archery
902 Backpacking
914 Cycling
916 Field Hockey
918 Figure Contouring
920 Fitness & Conditioning
922 Flag Football
924 Folk Dance
926 Golf
928 Gymnastics
932 Jogging
934 Modern Dance
936 Ski & Skier Conditioning
938 Soccer
940 Softball
944 Tennis
946 Track & Field
950 Weight Training
956 Speedball
960 Figure Contouring
962 Gymnastics
964 Modern Dance

WINTER COURSE SELECTIONS
(for the second and third quarters)

904 Backpacking
906 Badminton
908 Basketball
910 Bowling/Table Tennis
912 Judo/Wrestling
918 Figure Contouring
920 Fitness & Conditioning
924 Folk Dance
928 Gymnastics
930 Gym Speedball
932 Jogging
934 Modern Dance
936 Ski & Skier Conditioning
942 Team Handball
948 Volleyball
950 Weight Training
952 Wrestling
954 First Aid
958 Gym Games
960 Figure Contouring
962 Gymnastics
964 Modern Dance

Appendix F

Conceptual Approach for Physical Education

Subject Matter

Suggested Conceptual Approach for Teaching Physical Education

Teaching motor skills through a conceptual approach allows for the transfer of knowledge from one motor experience to another.

I. State the Goals Concerning:
- How man moves.
- Why man moves.
- The mechanics of movement.
- The foundations of movement.
- The human body and physical fitness.
- Health and fitness skills for daily living and recreation.
- The social-emotional implications involved in physical recreational skills
- Attitudes and values toward effective and efficient movement.

II. Identify the Concepts to be Learned Concerning:
- Physical development: cardiovascular endurance, strength, flexibility, etc.
- Motor development: balance and posture, timing and control, coordination, speed, rhythm, force, etc.
- Mechanical principles involved in movement: gravity, equilibrium, angles of rebound, projectiles, etc.

III. State Behavioral Goals for Each Module:
- Evaluate the goal. Is it on the student's level? Is it developmental? Is it clearly and specifically stated? Is it selected in terms of the concept identified? Is it stated in behavioral terms? Can it be evaluated?
- State only the goals that will receive major emphasis.
- State only a reasonable number of goals for each module.

IV. Selection of Enabling Activities:
- Consider student's past experience. Tasks should be simple enough for the student to succeed, yet difficult enough to be a challenge.
- Be sure to select activities related to the concepts that you wish the students to learn. Select experiences that will help the student reach the stated goals.
- Select experiences from several broad activity areas: movement experiences; rhythms; gymnastics; combatives; aquatics; conditioning and self-testing activities; games and sports: low organized games and relays, lead-up games and sports skills, team sports, dual and individual sports; and outdoor education skills. Students should have a wide exposure to many areas of activity and many activities within each broad area so that they can understand the relationships of one activity to another.

Select those experiences which are developmental and which provide experiences for the development of several motor, physical, or social-emotional components.

Select those enabling experiences which are safe for the developmental stage of the students.

Choose activities that will allow for maximum participation.

Place emphasis upon those activities which will likely be used in a student's recreational pursuits, presently and in the future.

Appendix G

Choice Form for Physical Education

Choices of Physical Education Activities

A. Complete this information:

1. Date: _____
2. Name of your school: _____
3. Your grade level: _____
4. Check one: Boy _____ Girl _____

B. Indicate your choices of physical education activities by checking below one of the three spaces for each activity listed.

		YES-Include this activity in our physical education program.	NO-Do not include this activity in our physical education program.	I am not familiar with this activity.
1.	Angling			
2.	Apparatus			
3.	Archery			
4.	Badminton			
5.	Basketball			
6.	Body Mechanics			
7.	Bowling			
8.	Camping			
9.	Diving			
10.	Field Hockey			
11.	Folk Dancing			
12.	Golf			
13.	Handball			
14.	Horseshoes			
15.	Lifesaving			
16.	Modern Dancing			
17.	Paddle Tennis			
18.	Physical Fitness			
19.	Shuffleboard			
20.	Softball			
21.	Soccer			
22.	Speedball			
23.	Square Dancing			
24.	Swimming			
25.	Table Tennis			
26.	Tennis			
27.	Track and Field			
28.	Trampolining			
29.	Tumbling			
30.	Volleyball			
31.	Weight Training			
32.	Wrestling			

C. List other activities which you would like to have included in our physical education program.

1. _____ 4. _____

2. _____ 5. _____

3. _____ 6. _____

Puckett, John, Guide to An Effective Physical Education Program. New York, New York: Parker Publishing Co., Inc., 1976.

Appendix H

Modern Concepts of Physical Fitness

MODERN CONCEPTS OF PHYSICAL FITNESS

By Harold B. Falls

During its November 1979 meeting, the AAHPERD Board of Governors gave final approval to the new AAHPERD Health-Related Physical Fitness Test. This act brought to fruition the efforts of dozens of individuals who have been involved in development of the test--a process that has continued for over five years. Approval does not represent the culmination of activities on the part of those individuals within AAHPERD who are convinced of the importance of health-related physical fitness. It merely represents a transition of efforts from one phase to another. Immediately ahead is release of the major publications presenting the new test and its rationale to the profession along with the process of getting the test implemented within the schools.

The Task Force on Youth Fitness has now completed its work on the two basic manuals. The first is a well-illustrated manual outlining the test items, presenting brief rationale, and detailing instructions for their administration. The manual provides norm tables to be used in evaluation of students' physical fitness. An important feature is a chapter presenting guidelines for the development and maintenance of health-related physical fitness. The chapter is intended as an aid to the teacher and student in setting up and conducting an individualized physical fitness program.

A second publication provides technical aspects of the test. This manual will include detailed discussion of the rationale for the various test items, information on validity and reliability, details of the norming procedures, a history of youth fitness testing and of the development

of this test, and descriptive statistics associated with the test items. The technical manual should provide a stimulus for further research and study of the new test.

After publication, both test manuals will be available from AAHPERD Publication/Sales. The new health-related physical fitness test will not replace the current AAHPERD Youth Fitness Test, also available from AAHPERD Publication/Sales.

Implementation of the New Test

One of the recommendations made to the Alliance Board of Governors by the Task Force on Youth Fitness was that the Physical Fitness Council of ARAPCS be charged with coordinating all efforts associated with implementing the new test. This recommendation was approved, and the Physical Fitness Council is already well under way with its work. This article is one part of that implementation process.

In many instances the implementation process will be easy. Many individuals were already using the new test even before its approval by the Alliance. For various reasons, however, there has been resistance to the new test. In some cases this has merely been the usual resistance to change in any form. Persons become comfortable with something they've been doing for a long time, and they don't want to change because it means extra effort on their part. Others view the new test as presenting greater administrative problems, especially the sum of skinfolds item (skinfold calipers must be purchased and teachers must learn how to use them). Still others have a basic philosophical disagreement with the new test. They do not accept the concept of health-related physical fitness and prefer to view physical fitness as primarily performance-related, which is

the approach taken with the established AAHPERD Youth Fitness Test.

The Task Force on Youth Fitness and the Physical Fitness Council of ARAPCS believe that much of the above problem stems from a failure to understand the basic differences between health-related and performance-related fitness, coupled with a lack of appreciation of the fundamental importance of health-related fitness to all children, youth, and adults. It is toward this area of misunderstanding that the major thrust of this article is directed. It spells out the distinction between health-related and performance-related physical fitness and presents a rationale for emphasis of health-related fitness in school physical education programs.

There is probably little disagreement that U. S. citizens in general are low in fitness when compared with those in other countries. The original development of the AAHPERD Youth Fitness Test was stimulated in large part by just such comparisons between U. S. and European children in the 1950s. The situation hasn't changed appreciably over the years, which points out clearly the need for both improved cardiovascular fitness programs and health-related fitness education.

Health-Related vs Performance-Related Physical Fitness

Health-related fitness refers to those aspects of physiological and psychological functioning which are believed to offer the individual some protection against degenerative type diseases such as coronary heart disease, obesity, and various musculoskeletal disorders. These afflictions have been referred to as "hypokinetic diseases" by Hans Kraus and Wilhelm Raab, because they are often associated with low levels of energy expenditure common to the sedentary person. Surely this type of fitness

should be of primary concern to every individual within our society. Performance-related fitness, on the other hand, includes those qualities of function that provide the individual with the ability to participate in sport activities with greater power, strength, endurance, skill, etc., than would otherwise be the case. The ultimate example of a person with this type of fitness would be the outstanding professional or Olympic athlete.

Because of our responsibilities as educators, a basic emphasis should be placed on health-related fitness--fitness that is important to everyone. However, the basic components of health-related fitness, the "essentials of fitness," are also important components of performance-related fitness in many sports, and the fundamental principles of development and maintenance of the components are common to the two areas. The major differences lie in the degree to which each component must be developed. For example, the Olympic marathon champion must have a heart and circulatory system functioning at an extremely high level in order to be able to deliver enough oxygen to the muscles to sustain the level of energy metabolism demanded by the sport. The average individual, on the other hand, can have a system functioning at 60-70% of the marathoner's capacity and still receive optimum levels of protection from the development of circulatory disease.

It should be noted that an individual may be high in certain components of performance-related fitness but low in health-related fitness and vice versa. An example would be baseball players who train only for their sport. Although these athletes are often very strong, usually exhibit high levels of skill in throwing, catching, and batting, and may possess exceptional

sprinting speed, they are not necessarily high in other components of fitness, such as maximal oxygen consumption and low percentage body fat, both of which are important measures of health-related fitness.

The reason for the relatively low standing of baseball players on certain components of health-related fitness is that their sport is one that does not demand the kind of activity that would develop cardiorespiratory fitness and low percentage of body fat. Baseball is a low energy sport requiring only about 5 kilocalories per minute of energy expenditure, less than half the energy cost of handball. The game does not place a very high stress on the circulatory system, and it doesn't burn up many extra calories. Baseball is a sport requiring speed, skill, and strength. The longest continuous run a player would be expected to make is for an inside-the-park home run, a distance of 120 yards! Football is another popular sport that emphasizes strength, speed, and skill, and analyses of fitness components in football players show them to be similar to nonathletes on tests of body composition and cardiorespiratory function.

The statements above should not be interpreted as an attempt to belittle baseball and football. These sports are merely used as an example of how a person may be fit to perform in an athletic sense but not fit in the health context. They are mentioned also because they are popular spectator sports and because they are participated in by many young people, often to the neglect of other forms of physical activity.

The Four Basic Components of Health-Related Fitness

The basic components of health-related fitness are cardiovascular function, body composition, strength, and flexibility. These are also

among the basic components in the performance-related fitness area. Again, it should be emphasized that the major differences lie in the degree to which each component must be developed within the two areas. The basic health-related fitness components are measured in the new AAHPERD test by the one-mile or nine-minute run, sum of subscapular and triceps skinfolds, one-minute timed sit-up, and sit and reach, respectively.

Cardiovascular Function

Cardiovascular function is the most important component in the health-related fitness area. Although the evidence accumulated thus far is not unequivocal, many cardiologists, physiologists, physical educators, and other health professionals are convinced that physical activity at levels sufficiently high enough to promote improved cardiovascular function is a potent factor in either preventing circulatory disease altogether or reducing its effect if it does occur.

Another facet of cardiovascular function that should not be overlooked is its impact on physical working capacity. The oxygen delivered to working muscles is critical to the energy transformation that occurs within them, especially when they are called upon to work for any significant length of time. A heart and circulatory system functioning at a higher level (delivering more blood) is also making more oxygen available to the muscles. This increases the individual's ability to work and/or exercise at a greater intensity and/or a longer period of time. The fatigue prevention aspect of this quality is very important.

The criterion for cardiovascular fitness and physical working capacity is the relative level of functioning within the heart and circulatory system. In order to evaluate cardiovascular function, it must be measured. Valid

and reliable procedures are available, and as educators we must make use of them.

Body Composition

Body composition is defined as the relative percentages of fat and fat-free body mass. It is an important correlate to cardiovascular function as far as health-related fitness is concerned. Excess amounts of body fat take the form of "excess baggage" when it becomes necessary to move the body from one place to another. Therefore, for any given amount of work, the energy expenditure is increased in the obese. The greater demand for energy causes the circulation to work harder. Also, an obese person usually consumes a diet high in saturated fats and cholesterol. The resulting greater level of circulating blood fats increases the probability of developing atherosclerosis--an important precursor to coronary heart disease.

The problem of obesity in the United States is widespread. The American Medical Association has estimated that over 50% of all adults can be considered overweight, and surveys among school children indicate that a similar problem exists for at least 40% of that population. Retention of body fat at any age is a health problem of considerable concern, but it is especially significant in children and adolescents because obese individuals in those age ranges are much more likely to become fat adults than are their nonfat peers.

In addition to an increased incidence of coronary heart disease among obese persons, certain other health problems are prevalent. These include greater risk of developing and suffering from hypertension, diabetes mellitus, gall bladder disease, degenerative arthritis, kidney disease, adverse pos-

tural changes, delayed puberty in children, and decreased endurance and work capacity. It has been estimated that if all deaths from cancer were eliminated, two years would be added to the life span, and if all the deaths related to obesity were removed, the life span would increase five years! Indeed, most medical authorities recommend that one of the best personal preventive and rehabilitative health practices available to an individual is reduction or prevention of excess body fat.

Strength

A third important component of health-related fitness is muscular strength. Strength is usually defined as a muscle or muscle group's relative capacity for exerting force against some external resistance. The importance of strength to high-level performance in sport activities is rather obvious to most persons. Everything else being equal, higher levels of strength usually enable the possessor to jump higher, throw farther, push harder, and resist the efforts of an opponent to a greater degree.

The importance of strength in general health is perhaps less readily apparent. However, stronger muscles better protect the joints which they cross. As a result, the individual is less susceptible to strains, sprains, and pulls that sometimes occur when one participates in physical activity. In addition, better tone in the muscles of the trunk aids in preventing some of the more common postural problems that plague us (e.g., sagging abnormal abdominal organs, round shoulders, and low back pain.)

The strength of the abdominal musculature is of critical importance in the etiology of the low back syndrome, one of the most prevelant health problems. Medical reports indicate that low back pain is experienced by

approximately 80% of the population at some point in their lifetimes. Physical fitness experts, physical therapists, and orthopedic surgeons link the high incidence of low back problems with a corresponding lack of exercise. The general logic is that muscles which are easily fatigued and/or strained cannot support the spine in proper alignment. Weak abdominals and inflexible posterior thigh muscles, in particular, allow the pelvis to tilt forward causing a concurrent and abnormal arch in the low back. Shortened, inflexible muscles thus result in decreased mobility and increased possibilities of strain, spasm, and pain. The end result is the "low back syndrome."

In addition to protection from the problems described, persons possessing optimum levels of strength development are likely to derive more satisfaction from recreational sports participation. They should be more successful in the execution of sport skills and less susceptible to fatigue. Because of this success, they are more likely to engage in recreational sport activities and derive the major benefits of cardiovascular conditioning, weight control, and tension relief.

Flexibility

The fourth important component of health-related fitness is flexibility. In the physical education and sport context, flexibility refers to the degree to which a joint may move through its maximum possible normal range of motion. The determining factor in joint range of motion is the extensibility of the associated connective tissue (tendons and ligaments) in and around the joint. Any restriction in the normal extensibility of a joint's connective tissue defines a flexibility problem.

From a health standpoint, loss of joint flexibility often contributes

to postural problems. These usually result from the adaptive shortening of connective tissue on one side of a joint concurrent with a loss of tone in the muscles on the opposite side of the joint. Examples are (1) the condition of round shoulders in which shortened tendons and ligaments in the upper chest area allow the associated muscles to draw the shoulders forward and (2) the common adult problem of an inability to bend forward and touch the toes with the hands, while keeping the knees fully extended. A primary cause of the latter problem is adaptive shortening of the connective tissue in the lower back and the posterior thigh areas. The implications for adequate levels of both flexibility and strength in the prevention of back problems are obvious.

Adequate flexibility is also an important factor in the performance of many sport skills--both recreational and at higher competitive levels. If an individual suffers from a loss of flexibility, even high levels of development in other fitness components such as strength and endurance may be of decreased benefit. If there is decreased range of motion in a joint, the individual will be less effective in expressing whatever strength quality is present within the muscles acting over that joint. Also, the reduced range of motion may prevent the individual from observing proper mechanical principles in the execution of a skilled movement, lowering the level of performance. Any resulting misalignment of body segments and/or compensations within other joints can increase the possibility of joint or muscle injury.

Back to the Basics

Adequate levels of cardiovascular function, body composition, strength (especially abdominal), and flexibility (especially low back and posterior

thigh) must form a base for all other components of physiological functioning. These are the components that have been shown by research and/or clinical practice to be significantly related to health. Adequate function in these components can have a positive effect on one's quality of life throughout childhood and adult years. As health and physical educators, our major claim to a position in the educational world is the contribution learnings in our fields can make to an improved quality of life.

In many fields of education today there is much agitation for a "return to the basics." In physical fitness, the health-related components outlined above are the basics. As professionals we are derelict in carrying out our responsibilities if we do not provide each and every student an opportunity to learn about something that can have such a great impact on their lives, both now and in their future years. In order to learn adequately about health-related physical fitness, students must learn how to measure the components and become aware of their own status on each. Valid and reliable procedures for this purpose are available in the AAHPERD Health Related Physical Fitness Test battery.

The test manual AAHPERD Health-Related Physical Fitness may be ordered from AAHPER Publications, P.O. Box 704, 44 Industrial Park Circle, Waldorf, MD 20601.

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Appendix I

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